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(54) Title: PHYSIOLOGICAL MEDIUM FOR PERFUSING, PRESERVING AND STORING ISOLATED CELL, TISSUE AND ORGAN SAMPLES

(57) Abstract: A physiological liquid medium is provided having the basic, synergistic components to allow its universal application in preserving cellular and functional integrity *in vitro* of different cell, tissue and organ types isolated from different mammalian species. The medium comprises an aqueous solution in sterile purified water of: i) a salt component comprising: a) from 100 to 150 mmoles/L of sodium ions, b) from 2.5 to 6.2 mmoles/L of potassium ions, c) from 1.0 to 2.5 mmoles/L of calcium ions, d) from 0.4 to 25 mmoles/L of magnesium ions, and e) from 96 to 126 mmoles/L of chloride ions; ii) a buffer component comprising: f) from 21 to 27 mmoles/L of bicarbonate ions, and g) from 1 to 12 mmoles/L of TES, MOPS or BES; iii) a substrate component comprising: h) 2 to 11 mmoles/L of glucose, i) 50 to 150 µmoles/L of glycerol and j) 7 to 15 µmoles/L of choline; iv) an amino acid component comprising: k) 5 to 400 µmoles/L of glutamate, l) 5 to 200 µmoles/L of aspartate and m) 100 to 2000 µmoles/L of glutamine; v) a co-enzyme component comprising: n) 1 to 120 nmoles/L of thiamine cocarboxylase; vi) a vitaminoid component comprising: o) 40 to 70 µmoles/L of D- or DL- or L-carnitine; vii) a protein component comprising: p) 5 to 200 m I.U./L of porcine or human insulin.

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